

蜉蝣一新属新种记述

吴福桢 郭予元 李裕嫦

(中国农科院植物保护研究所)

近年来华北、东北有些省份的室内和舰船上发现一种新的蜉蝣,与其它蜉蝣混合发生,在局部地点成为优势种。经对有关单位送来室内和舰船上发生的多批标本进行鉴定,确定该虫隶属于姬蜉科(Pseudomopidae),是新属新种,与我所现存采自浙江天目山、陕西楼观台和山东青岛沙子口的野外标本同属一种。模式标本存放在中国农科院植物保护研究所。

拟刺板蜉属 *Discalida* 新属

模式种 *Discalida pallidimarginia* 新种(图1)。

属征 成虫体中等大,色暗,两性稍异形(雌虫体翅比雄虫短粗)。头端部突出在前胸背板前方,颜面稍隆起。前胸背板横椭圆形,两侧稍下倾,后缘中部稍突出,最宽处在中部后方。翅发育正常,超过腹端,雄虫前翅翅面光泽不强,脉纹隆起。前后翅R脉在端部明显分叉。后翅端三角不明显,M、Cu脉轻度弯曲,M脉简单,Cu脉具不完全分枝。前足腿节前下缘具B₃型刺(图2),足跗节具垫。雄虫肛上板三角形短小,端部下倾,下生殖板基本对称,腹刺正常发育。雌虫肛上板三角形,超出下生殖板。

本属成虫外形近似 *Scalida* 属,前足腿节前下缘的刺型和腹部背面也与 *Scalida* 属一致,但是翅的脉型却与 *Symploce* 属一致,而♂肛上板和下生殖板又近似于 *Margattea* 属。上述三方面的形态特征是这三个已知属相互区别的主要依据,而本属兼而有之(表1)。据此,本属不属于 *Scalida* Hebard 1929、*Symploce* Hebard 1916、*Margattea* Shelford 1911 三属中的任何一个属,应是一新属。

表1 本属与近似属的几个主要形态特征

属名	前翅R脉	后翅CuA脉	前足腿节前下缘刺型	♂腹部第一节背面	♂肛上板	♂下生殖板
<i>Discalida</i>	近中部分叉	有不完全分支	B ₃	不特化	对称,端部无刺	对称,腹刺等长
<i>Scalida</i>	不分叉	无不完全分支	B ₃	不特化	对称,端部有刺	不对称,不规则形
<i>Symploce</i>	近中部分叉	有不完全分支	A ₃	中部有毛簇	不对称	不对称,不规则形
<i>Margattea</i>	近中部不分叉	无不完全分支	B ₂	不特化	对称,端部无刺	对称,腹刺等长

淡缘拟刺板蜉 *Discalida pallidimarginia* 新种(图1)

成虫体中等大,暗褐色,两性稍异形。雄虫体较狭长,前胸背板侧缘及前翅肩域色淡,半透明,形成一明显的淡条带,故名淡缘拟刺板蜉。头顶凹陷,有几条横皱纹,额部单眼间

有点刻,单眼内侧有斜向内前方的细皱纹。复眼之长超过头部之半,眼间距小于触角基间距,等于或稍狭于单眼间距(图3),单眼点黄色,明显可见。上唇及唇基淡褐色。下颏须第4节短于第3节之长,第5节长于第3节。前胸背板横椭圆形,最宽处在中部后方,前缘微微弧形突出,后缘中部略呈钝角突出、两侧缘弧形突出,略下倾,色淡半透明,形成二新月形条斑;盘域稍凹陷。翅超出腹部末端,前翅狭长,端部略尖,肩域色淡,与前胸背板侧缘淡新月形条斑相接形成淡色条带,翅面光泽弱,脉纹清晰,稍隆起,R脉在端前具分支。后翅透明,翅脉大部无色,仅近前、后缘及翅端处褐色,以斜脉色较深,但不加粗;端三角不明显,R脉在端前分支,Cu脉具完全分支3—4根,不完全分支3—4根。足淡褐色,前足腿节前下缘中部具强刺4—5根,向外有十余根细短刺,端部3根强刺逐渐由内向外增大(图2);基部4个附节具垫,爪垫中等大。腹部狭长,黑褐色有光泽,背板无特化。肛上板显著短于下生殖板,近三角形,基部黑褐色横长方形,钝角形端部无色半透明,此半透明部分的大小变化很大,有的个体无透明部,肛上板呈钝弧形凸出。下生殖板大致对称,后缘稍向上弯曲,腹刺淡褐色,有微毛,等长端细。尾毛细长,端部淡褐色(图4a、b)。体长13—14,前胸背板长3—3.5,前翅长12—13,总长16—19毫米。

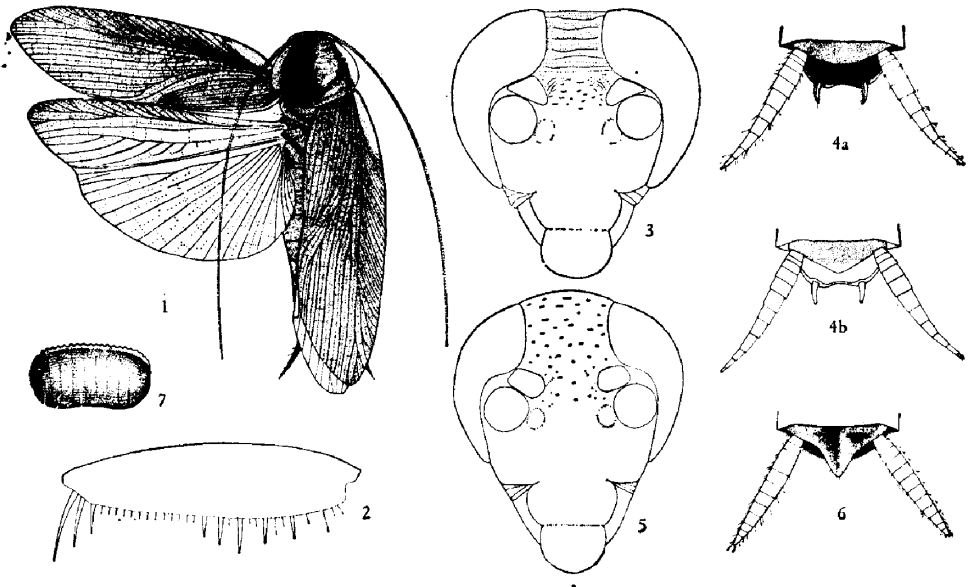


图1—7 淡缘拟刺板蠅 *Discalida pallidimarginia* sp. nov.

1. 雄虫 2. 前足腿节前面观 3. 雄虫头部正面观 4a. 雄虫尾端背面观(一) 4b. 雄虫尾端背面观(二)
5. 雌虫头部正面观 6. 雌虫尾端背面观 7. 卵鞘

雌虫较雄虫宽短,体色较深,光泽较强。前胸背板侧缘及前翅肩域无淡色条带。头部比雄虫窄,头顶略突出于复眼,有横条形刻点,额区刻点和皱纹比雄虫稀而浅,眼间距显宽于单眼间距(图5)。前胸背板略宽于雄虫,前缘缓弧形。翅超出腹端,但显然短于雄虫。肛上板三角形,端部呈锐角,中央有纵隆起。下生殖板后缘弧形。尾毛较雄虫粗壮(图6)。体长12—13,前胸背板长3.5—4.0,前翅长10—11.5,总长14—16毫米。

老熟若虫体较粗壮,腹部宽圆。体暗褐色,中后胸色略浅,光泽强,腹部背面近侧缘处色深。前胸背面前后缘平直,前窄后宽,两侧缘缓弧形下倾。体长约 10.0,前胸背板长 3.5 毫米。

卵鞘(图 7)棕色至黑褐色,肾状,有光泽,长 5.5—8.5 毫米。上缘有锯齿状边,卵鞘表面密布平行细纵棱,有 9—15 条横向浅沟,沟间距跨 3 个齿,实为 2 齿之宽。

分布 山东青岛、辽宁营口、上海、浙江天目山、陕西楼观台。

正模(♂),配模(♀): 辽宁营口, 1981. VIII. 19, 李洪国采;副模: 上海(2♂♂, 11♀♀), 1980. III, 江雪峰采;辽宁营口(8♂♂, 12♀♀), 同正模;浙江天目山禅源寺(1♂), 1957. VI. 30, 陕西楼观台(1♂), 1954. VII. 13, 山东青岛(1♂, 2♀♀), 1979. VI. 13。

生物学习性 目前对此虫的生活习性还缺乏全面了解。据辽宁省营口市卫生防疫站调查,成虫最早出现于 4 月下旬,7、8 月为高峰季节,10 月中旬基本消失。该站于 5 月在酒厂内先后捕到末龄若虫放于室内饲养,在室温 22—30℃,相对湿度 60—80% 条件下,半月左右开始羽化为成虫。成虫羽化 3 天后开始交尾,交尾后很快开始产卵,经一次交尾后可连续产卵。卵在卵鞘内,刚产出时卵鞘附着于母体尾端,1—2 天后脱落。每头雌虫平均产卵鞘 15.8 枚,每一卵鞘内有卵 28—30 粒。卵期较长,需经一个月以上开始孵化,孵化率一般在 50% 以上。若虫经 8 次蜕皮羽化为成虫,成虫寿命为 55—119 天。此蠊在营口地区仅在酒厂发现,以制曲车间虫口数量最高,为害较重,其它车间及仓库、休息室、办公室、卫生所等处虫口数量较低。该蠊多与日本大蠊混居于墙缝、木箱、垃圾堆中及杂物下,为杂食性。

参 考 文 献

- Brujijng, C. F. A., Studies on Malayan Blattidae, Zool. Meded., Leiden, 29, 1948, pp. 1—174.
 Hebard, M., Studies on Malayan Blattidae, Proc. Acad. Nat. Hist. Phil., LXXXI, 1929, pp. 1—109.
 Rehn, J. A. G., A Key to the Genera of North American Blattaria, Including Established Adventives, Ent. News, Lancaster, Pa. 61, 1950, pp. 64—7.
 Shelford, R., Orthoptera, Fam. Blattidae, Subfam. Phyllodromiinae, Gen. Ins., Vol. 73, 1908, pp. 1—29.
 Shiraki, T., Blattidae of Japanese Empire, Ins. Mats., Vol. 4, 1931, pp. 171—209.

DESCRIPTION OF A NEW GENUS AND A NEW SPECIES OF PSEUDOMOPIDAE (BLATTARIA)

WOO FO-CHING GUO YU-YUAN LI YU-CHANG

(Institute of Plant Protection, Chinese Academy of Agricultural Sciences)

In recent years, a new cockroach was found infesting in houses, on ships and naval vessels of several north-eastern and eastern provinces of China. It occurs indoor mixed with other cockroaches, and as a dominator in some places. Identification was made based on several batches of specimens sent by those units concerned, it is determined that

both the genus and species names belonging to Pseudomopidae are new to science, and specimens of the same species have also been collected outdoor from Tienmushan Mountain, Zhejiang; Lou-guan-tai, Shaanxi; and Qingdao, Shantung.

This paper presents a description of the new genus and new species. Type specimens are deposited in the Institute of Plant Protection, Chinese Academy of Agricultural Sciences.

***Discalida* gen. nov.**

Genotype: *Discalida pallidimarginia* sp. nov.

Ventro-cephalic margin of cephalic femora armed after type B, and with three heavy spines distad (B3). Discoidal vein of tegmina and wings forking before distal portion, ulnar vein of wings with incomplete branches, abdomen unspecialized of male, subgenital plate symmetrical, styli normal and symmetrical.

Each of the three features mentioned above: spine pattern of cephalic femora, vein pattern of tegmina and wings, and subgenital plate of male, is similar to *Scalida* Hebard, *Symploce* Hebard and *Margattea* Shelford, respectively, but none of these three genera is endowed with all of those features like this type. For this reason, it should be a new genus in addition to the genera established before.

***Discalida pallidimarginia* sp. nov.** (Fig. 1)

Size medium, dark brown, both sexes somewhat dimorphous. Vertex of male slightly concaved and with several transverse wrinkles between eyes (Fig. 3). There are two pale and translucent bands on lateral margins of pronotum and humeral areas of tegmina in male. Flying organs normally developed, beyond the end of abdomen. Ventral-cephalic margin of cephalic femora armed after type B3 (Fig. 2). Discoidal vein of tegmina and wings forking before distal portion, ulnar vein of wings with 3—4 complete and 3—4 incomplete branches, apical triangle inconspicuous. Dorsal surface of male abdomen unspecialized. Anal plate triangular, much shorter than subgenital plate, with obtuse angle at apex in male (Figs. 4a, b), while in female, sharp angle of apex and exceeds the subgenital plate (Fig. 5). The male subgenital plate symmetrical, styli normal and equally developed (Fig. 4).

Measurement: male, body 13—14, pronotum 3—3.5, tegmina 12—13, total 16—19 mm; female, body 12—13, pronotum 3.5—4.0, tegmina 10—11.5, total 14—16 mm.

Distribution: Qingdao, Shantung; Yingkou, Liaoning; Shanghai; Tienmushan Mountain, Zhejiang; Lou-guan-tai, Shaanxi.

Holotype (male) and allotype (female): Liaoning, 19. VIII. 1981; paratypes: Shanghai (2 males, 11 females), III. 1980; Liaoning (8 males, 12 females), 19. VIII. 1981; Tienmushan Mountain, Zhejiang (1 male), 30. VI. 1957; Lou-guan-tai, Shaanxi (1 male), 3. VIII. 1954; Qingdao, Shantung (1 male, 2 females), 13. VI. 1979.